[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-3607; Directorate Identifier 2015-CE-010-AD]

RIN 2120-AA64

Airworthiness Directives; M7 Aerospace LLC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all M7 Aerospace LLC Models SA26-AT, SA226-T, SA226-AT, SA226-T(B), SA226-TC, SA227-AT, SA227-TT, SA227-AC (C-26A), SA227-BC (C-26A), SA227-CC, and SA227-DC (C-26B) airplanes. This proposed AD was prompted by information that the airplane flight manual (AFM) does not provide adequate guidance in the handling of engine failures, which may lead to reliance on the negative torque system (NTS) for reducing drag. This condition could lead the pilot to not fully feather the propeller with consequent loss of control. This proposed AD would require inserting updates into the airplane flight manual (AFM) and/or the pilot operating handbook (POH) that will clearly establish that the NTS is not designed to automatically feather the propeller but only to provide drag protection. We are proposing this AD to correct the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact M7 Aerospace LLC, 10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210) 804-7766; Internet: http://www.elbitsystems-us.com; email: MetroTech@M7Aerospace.com. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For

information on the availability of this material at the FAA, call 816-329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-3607; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Michael Heusser, Aerospace Engineer, FAA, Fort Worth Aircraft Certification Office, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone: (817) 222-5038; fax: (817) 222-5960; e-mail: Michael.A.Heusser@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section.

Include "Docket No. FAA-2015-3607; Directorate Identifier 2015-CE-010-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The FAA received a report of an accident where an M7 Aerospace LLC Model SA227-AC airplane experienced left engine power loss and consequent loss of control. Training manuals provide descriptions of the negative torque system (NTS), which provides partial anti-drag protection if a negative torque condition is sensed. This feature might cause pilots to assume the system automatically provides full anti-drag protection in the event of an engine failure or power loss. The pilot must also take prompt action to fully feather the propeller on the failed engine to reduce drag. A pilot's sole reliance on the NTS for reducing drag in the event of engine power loss may result in the pilot's failure to initiate the Engine Failure Inflight checklist and feather the propellers in time.

This condition, if not corrected, could result in loss of control of the aircraft due to excessive asymmetric drag.

Related Service Information under 1 CFR part 51

We reviewed the following M7 Aerospace LLC AFM revisions:

- AFM revision dated May 14, 2015, section III, SA26-AT Dash One;
- AFM revision dated May 14, 2015, section III, SA26-AT Dash Two;
- AFM revision B-33, sections i and III, SA226-AT, dated November 14, 2014;
- AFM revision A-29, sections i and III, SA226-T, dated November 14, 2014;
- AFM revision B-29, sections i and 3, SA226-T(B), dated November 14, 2014;
- AFM revision A-43, sections i and III, SA226-TC, dated November 14, 2014;
- AFM (4AC) revision B-11, sections 0 and 3, SA227-AC, dated November 14, 2014;
- AFM (4MC) revision A-12, sections 0 and 3, SA227-AC, dated November 14,
 2014:
- AFM (6AC) revision A-16, sections 0 and 3, SA227-AC, dated November 14, 2014;
- AFM (7AC) revision B-19, sections 0 and 3, SA227-AC, dated November 14, 2014;
- AFM (7MC) revision A-13, sections 0 and 3, SA227-AC, dated November 14,
 2014;
- AFM (8AC) revision A-15, sections 0 and 3, SA227-AC, dated November 14,
 2014;
- Pilot operating handbook (POH)/AFM (4AT) revision A-12, sections 0 and 3,
 SA227-AT, dated November 14, 2014;
- POH/AFM (6AT) revision 13, sections 0 and 3, SA227-AT, dated November 14, 2014;
- POH/AFM (6AT), section 7, revision 7, SA227-AT, dated November 14, 2014;

- POH/AFM (7AT) revision B-12, sections 0 and 3, SA227-AT, dated November 14, 2014;
- POH/AFM (8AT) revision 13, sections 0 and 3, SA227-AT, dated November 14,
 2014;
- AFM (6BC) revision 21, sections 0 and 3, SA227-BC, dated November 14, 2014;
- AFM (6CC) revision 17, sections 0 and 3, SA227-CC, dated November 14, 2014;
- AFM (6DC) revision 34, sections 0 and 3, SA227-DC, dated November 14, 2014;
- AFM (8DC) revision 8, sections 0 and 3, SA227-DC, dated November 14, 2014;
- POH/AFM revision 15, sections 0 and 3, SA227-TT Fairchild 300, dated
 November 14, 2014;
- POH/AFM revision 13, sections 0 and 3, SA227-TT Fairchild 312, dated
 November 14, 2014;
- POH/AFM revision 29, sections 0 and 3, SA227-TT, dated November 14, 2014.
 The M7 Aerospace LP service information describes procedures for inflight
 engine shutdown procedures. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

In addition, minimum controllable airspeed for single engine landing is being investigated for possible future action.

Proposed AD Requirements

This proposed AD would require updates be inserted into the AFM that will clearly establish that the NTS is not designed to automatically feather the propeller but only to provide drag protection.

The proposed requirements do not address anything on the above-referenced minimum controllable airspeed for single engine landing.

Costs of Compliance

We estimate that this proposed AD affects 360 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Insert revision into the appropriate AFM describing action to take when feathering propellers in the event of engine failure.	.5 work-hour X \$85 per hour = \$42.50	Not applicable	\$42.50	\$15,300

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD): M7 Aerospace LP: Docket No. FAA-2015-3607; Directorate Identifier 2015-CE-010-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to M7 Aerospace LLC Models SA26-AT, SA226-T, SA226-AT, SA226-T(B), SA226-TC, SA227-AT, SA227-TT, SA227-AC (C-26A), SA227-BC (C-26A), SA227-CC, and SA227-DC (C-26B) airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 01, Operations Information.

(e) Unsafe Condition

This AD was prompted by information that a pilot's sole reliance on the NTS for reducing drag in the event of engine power loss may result in the pilot's failure to initiate the Engine Failure Inflight checklist and feather the propellers in time. This could lead the pilot to not fully feather the propeller with consequent loss of control. We are issuing this AD to add information to the AFM and/or POH that reliance on the NTS to reduce drag during an engine failure could lead the pilot to not fully feather the propeller with consequent loss of control.

(f) Compliance

Comply with this AD within 30 days after the effective date of this AD, unless already done.

(g) Actions

Incorporate the applicable M7 Aerospace LLC AFM revisions as listed in paragraphs (g)(1) through (g)(12) of this AD:

- (1) <u>For Model SA26-AT Dash One airplanes</u>: Insert pages III-1 through III-6, revised May 14, 2015; and pages III-7 through III-8, FAA Approved May 14, 2015; into the Merlin Model SA-26AT Dash One AFM.
- (2) <u>For Model SA26-AT Dash Two airplanes</u>: Insert pages III-1 through III-6, revised May 14, 2015; and pages III-7 through III-8, FAA Approved May 14, 2015; into the Merlin Model SA-26AT Dash Two AFM.
- (3) <u>For Model SA226-T airplanes</u>: Insert pages III-2 though III-26, revised November 14, 2014, into the Swearingen Merlin SA226-T AFM, Reissue A, dated June 28, 1976.
- (4) <u>For Model SA226-AT airplanes</u>: Insert pages III-2 through III-30, revised November 14, 2014, into the Merlin SA226-AT AFM, Reissue B, dated May 6, 1977.
- (5) For Model SA226-T(B) airplanes: Insert pages 3-2, Emergency Procedures, through page 3-20, Emergency Procedures, revised November 14, 2014; and pages 3-21 through 3-24, Emergency Procedures, issued November 14, 2014; into the Merlin SA226-T(B) AFM, Reissue B, dated November 2, 1979.
- (6) <u>For Model SA226-TC airplanes</u>: Insert pages III-2 through page III-24, revised November 24, 2014; and pages III-25 through III-32, FAA Approved November 14, 2014; into the Metro SA226-TC AFM, Reissue A, dated December 1, 1976.

- (7) For Model SA227-AT airplanes:
- (i) <u>Model 4AT</u>: Insert pages 3-4 through 3-30, Emergency Procedures, revised November 14, 2014; and pages 3-31 through 3-34, Emergency Procedures, FAA Approved November 14, 2014; into the SA227-AT (4AT) pilot operating handbook (POH)/AFM, Reissue A, dated November 30, 1988;
- (ii) Model 6AT: Insert pages 3-4 through 3-36, FAA Approved, Emergency Procedures, revised November 14, 2014, into the SA227-AT (6AT) POH/AFM, dated May 13, 1987.
- (iii) Model 7AT: Insert pages 3-4 through 3-30, Emergency Procedures, revised December 9, 2014, and pages 3-31 through 3-34, FAA Approved December 9, 2014, into the SA227-AT (7AT) POH/AFM, Reissue B, dated November 30, 1988.
- (iv) Model 8AT: Insert pages 3-4 through 3-30, Emergency Procedures, revised December 9, 2014; and pages 3-31 through 3-34, FAA Approved December 9, 2014; into the SA227-AT (8AT) POH/AFM, dated May 13, 1987.
- (8) For Model SA227-TT Fairchild 300 airplanes: Insert page 3-3 through 3-30, Emergency Procedures, revised December 9, 2014; and pages 3-31 through 3-34, Emergency Procedures, FAA Approved December 9, 2014; into the SA227-TT Fairchild 300 POH/AFM, Reissue A, dated August 7, 1981.
- (9) For Model SA227-TT Fairchild 312 airplanes: Insert page 3-3, Emergency Procedures, revised December 9, 2014; pages 3-5 through 3-30, Emergency Procedures, revised December 9, 2014; and pages 3-31 through 3-32, Emergency Procedures, FAA Approved December 9, 2014; into the Model SA227-TT Fairchild 300 (312) 12,500 LBS POH/AFM, dated October 4, 1981.
- (10) <u>For Model SA227-TT Fairchild Merlin IIIC airplanes</u>: Insert pages 3-3 through 3-24, revised December 9, 2014, and pages 3-25 through 3-32, issued December 9, 2014; into the SA227-TT Merlin IIIC POH/AFM, Reissue A, dated August 7, 1981.

- (11) For Model SA227-AC (4AC) airplanes: Insert pages 3-3 through 3-30, Emergency Procedures, revised November 14, 2014; into the SA227-AC AFM, Reissue B, dated November 7, 1990.
- (12) <u>For Model SA227-AC (4MC) airplanes</u>: Insert pages 3-3 through 3-30, Emergency Procedures, revised November 14, 2014; and pages 3-31 through 3-36, Emergency Procedures, FAA Approved November 14, 2014, into the SA227-AC AFM, Reissue A, dated May 22, 1989.
- (13) For Model SA227-AC (7AC) airplanes: Insert pages 3-3 through 3-30, Emergency Procedures, revised December 9, 2014; and pages 3-31 through 3-34, Emergency Procedures, FAA Approved December 9, 2014, into the SA227-AC AFM, Reissue B, dated April 2, 1986.
- (14) <u>For Model SA227-AC (7MC) airplanes</u>: Insert pages 3-3 through 3-30, Emergency Procedures, revised December 9, 2014; and pages 3-31 through 3-34, Emergency Procedures, FAA Approved December 9, 2014, into the SA227-AC AFM, Reissue A, dated May 22, 1989.
- (15) For Model SA227-AC (8AC) airplanes: Insert pages 3-3 through 3-30, Emergency Procedures, revised December 9, 2014; and pages 3-31 through 3-34, Emergency Procedures, FAA Approved December 9, 2014, into the SA227-AC AFM, Reissue A, dated May 22, 1989
- (16) <u>For Model SA227-AC (6AC) airplanes</u>: Insert pages 3-3 through 3-20, Emergency Procedures, revised November 14, 2014; into the SA227-AC AFM, Reissue A, dated May 22, 1989.
- (17) For Model SA227-AC (6BC) airplanes: Insert pages 3-3 through 3-30, Emergency Procedures, revised November 14, 2014; and pages 3-31 through 3-36, Emergency Procedures, FAA Approved November 14, 2014, into the SA227-BC AFM, dated September 25, 1989.

- (18) <u>For Model SA227-DC (6DC) airplanes</u>: Insert pages 3-3 through 3-26, Emergency Procedures, revised December 9, 2014; and pages 3-27 through 3-32, Emergency Procedures, FAA Approved December 9, 2014, into the SA227-DC AFM, dated August 23, 1991.
- (19) <u>For Model SA227-BC (C-26A) airplanes</u>: Insert pages 3-4 through 3-30, Emergency Procedures, revised December 9, 2014; and pages 3-31 through 3-36, Emergency Procedures, FAA Approved December 9, 2014; into the SA227-BC AFM, dated September 25, 1989.
- (20) <u>For Model SA227-CC (6CC) airplanes</u>: Insert pages 3-3 through 3-24, Emergency Procedures, revised December 9, 2014; and pages 3-25 through 3-30, Emergency Procedures, FAA Approved December 9, 2014; into the SA227-CC AFM, dated December 11, 1992.
- (21) For Model SA227-DC (8DC) airplanes: Insert pages 3-3 through 3-26, Emergency Procedures, revised December 9, 2014; and pages 3-27 through 3-32, Emergency Procedures, FAA Approved December 9, 2014; into the SA227-DC AFM.

 (h) Alternative Methods of Compliance (AMOCs)
- (1) The Manager, Fort Worth Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (i)(1) of this AD.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Michael Heusser, Aerospace

Engineer, FAA, Fort Worth Aircraft Certification Office, 2601 Meacham Blvd., Fort

Worth, Texas 76137; telephone: (817) 222-5038; fax: (817) 222-5960; e-mail:

Michael.A.Heusser@faa.gov.

(2) For service information identified in this AD, contact M7 Aerospace LLC,

10823 NE Entrance Road, San Antonio, Texas 78216; phone: (210) 824-9421; fax: (210)

804-7766; Internet: http://www.elbitsystems-us.com; email:

MetroTech@M7Aerospace.com. You may view this referenced service information at the

FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For

information on the availability of this material at the FAA, call 816-329-4148.

Issued in Kansas City, Missouri, on August 19, 2015.

Earl Lawrence,

Manager, Small Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2015-20977 Filed: 8/24/2015 08:45 am; Publication Date: 8/25/2015]

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